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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,478	04/14/2004	Mutombo J. Muvundamina	DH-006-US-01	8136

7590 03/13/2006  
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EXAMINER

BRUNSMAN, DAVID M

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 03/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/825,478	<b>Applicant(s)</b> MUVUNDAMINA, MUTOMBO J.	
	<b>Examiner</b> David M. Brunsman	<b>Art Unit</b> 1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 December 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

Art Unit: 1755

The rejection of claim 14 under section 112 is withdrawn in view of applicant's response.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9, 11-13, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 4941921 in view of US Patent 6273928.

Example 3 of the '921 patent teaches making a Stein-Hall adhesive by adding 1.3% of a boron containing solution comprising borax decahydrate, glucose and water; to the reaction zone. The difference between this patent and the instant claims is that the borax is dissolved in the glucose. Column 3, lines 10-22, teaches an aqueous boron suspension that is physically stable as well as pourable preferably comprising 10-12% sodium pentaborate, 0.5-1.5% swellable clay, 0.05-0.16% xanthan gum, 0-0.5% polyacrylate dispersant and the remainder water. It would have been obvious to one of ordinary skill in the art to replace the boron source of the '921 patent with the suspension of the '928 patent because the '928 patent teaches it forms a stable pourable suspension useful anywhere there is a need for boron suspensions. The particular properties recited would be expected to result as the claimed compositions are similar to those suggested by the prior art. In that the combination of the recited boron suspension and the stein-hall process would have been obvious, the packaging of said boron suspension with directions for its use would have likewise been obvious to one of ordinary skill in the art.

Art Unit: 1755

Claims 10 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 4941921 in view of US Patent 6273928, as applied above, in view of US Patent 5075360.

Claims 10 and 14 recite addition of particular waterproofing resins to the adhesive. Column 6, line 55 through column 7, line 10 of the '360 patent teaches that it is within the level of ordinary skill in the art to add waterproofing resins such as acetone-formaldehyde resins to stein-hall adhesives. It would have been obvious to one of ordinary skill in the art to add such resins to the above adhesives because they are known in the art to increase the water resistance of stein-hall adhesives.

Claims 16-23 rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5075360 in view of US 4941921 and 6273928 as set forth in the rejection of claim 8 above.

The examples of the '360 patent teach the formation of double and single backer corrugated board by applying a stein-hall adhesive to the fluted tips of a corrugated liner. The difference between the '360 patent and the instant claims is the adhesive used. It would have been obvious to one of ordinary skill in the art to employ the adhesive suggested by the combination of 4941921 and 6273928 in the process of 5075360 because the prior art teaches it is useful as a stein-hall adhesive.

Applicant's arguments with respect to the outstanding art rejections have been carefully considered, but not found persuasive. The '921 reference teaches that it is easier to meter the borax component in liquid form than in solid and recognizes the problem addressed in the instant application that aqueous solutions of borax are too dilute to be practical. The '928 reference teaches that liquid suspensions of borax of high concentration are available. There is no evidence of record that one of ordinary skill in the art would consider a suspension as falling outside the genus of "liquid". It would have been obvious to one of ordinary skill in the art to combine the teachings of the '921 and '928 patents

Art Unit: 1755

because the use of a newly available means from and implementary art is within the level of ordinary skill in the art. The '928 reference teaches one possible use for the boron suspensions to be diluted on crops. The intended purpose of forming a high concentration boron suspension retained. A reference is good not only for what it teaches by direct anticipation but also for what one of ordinary skill might reasonable infer from the teachings. *In re Opprecht*, 12 USPQ2d 1235. The references relied upon need not be physically combinable. *In re Etter*, 225 USPQ 1.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M. Brunsman whose telephone number is 571-272-1365. The examiner can normally be reached on M, W, F, Sa; 6:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1362. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1755

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David M Brunzman  
Primary Examiner  
Art Unit 1755

DMB

A handwritten signature in black ink, appearing to read 'David M Brunzman', with a long horizontal flourish extending to the right.